



## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/25257

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H04L12/40

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 94 08305 A (COMPAQ COMPUTER CORP) 14 April 1994 (1994-04-14) page 4, line 15 - page 5, line 30	1, 2, 5-7, 13
Y		3, 4, 8-12, 14-17
Y	US 4 674 085 A (ARANGUREN WILLIAM L ET AL) 16 June 1987 (1987-06-16)  column 7, line 25 - line 68	3, 4, 8-12, 14-17
A	WO 98 30961 A (N O B ELEKTRONIK AB ;BJOERN FREDRIK (SE); NILSSON GOERAN (SE); BER) 16 July 1998 (1998-07-16) page 6, line 11 - line 17; figure 2  -/-	1-17

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

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\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

22 May 2003

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 5 799 040 A (LAU HUNG-WAH ANTHONY)  25 August 1998 (1998-08-25)</p>	

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/25257

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9408305	A	14-04-1994	AU 5350694 A WO 9408305 A1	26-04-1994 14-04-1994
US 4674085	A	16-06-1987	CA 1259682 A1 DE 3675046 D1 EP 0195595 A2 JP 2045366 C JP 7079350 B JP 61219247 A	19-09-1989 29-11-1990 24-09-1986 09-04-1996 23-08-1995 29-09-1986
WO 9830961	A	16-07-1998	SE 507046 C2 AU 5581498 A EP 0946917 A1 JP 2001507489 T SE 9604759 A WO 9830961 A1 US 6151298 A	23-03-1998 03-08-1998 06-10-1999 05-06-2001 23-03-1998 16-07-1998 21-11-2000
US 5799040	A	25-08-1998	US 5541957 A EP 0713623 A1 WO 9534976 A1 US 5784408 A	30-07-1996 29-05-1996 21-12-1995 21-07-1998